

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337

**Comments of the  
Washington Utilities and Transportation Commission**

On April 21, 2010, the Federal Communications Commission (“Commission”) released a notice of inquiry (“NOI”) and notice of proposed rulemaking (“NPRM”) which, collectively, are intended to be an initial, yet material step toward implementation of the Commission’s National Broadband Plan (“NBP”) that was previously submitted to Congress. According to the Commission, these proceedings are intended to establish the analytical foundation necessary for the Commission to redistribute federal universal service funds in a more efficient, targeted manner that avoids waste and minimizes burdens on American consumers. The NOI seeks comment on whether the Commission should use a model to help determine universal service support levels in areas where there is no private sector business case to provide broadband and voice services. The NOI also seeks comment on the best way to create an accelerated process to target funding toward new deployment of broadband networks in unserved areas of the nation. The accompanying NPRM also seeks comment on specific common-sense reforms to cap growth and cut inefficient funding in the

legacy high-cost support mechanisms and shift some portion of the savings toward support of broadband service.

The Washington Utilities and Transportation Commission (“UTC”) appreciates the opportunity to comment on certain issues raised in the NOI/NPRM and supports the Commission’s initiative in addressing the complex issues surrounding promotion of widespread deployment of broadband service in the context of revisions to the nation’s existing universal service support mechanism.<sup>1</sup> While the NOI/NPRM tees up a full range of important investigative and methodological considerations regarding broadband funding, the UTC’s comments focus on those issues that it believes are most critical at this time for Washington’s telecommunications consumers.

Before addressing particular questions posed in the NOI/NPRM, the UTC wishes to make clear that while it is likely there will be substantial debate regarding the detail and nature of an analytical framework to assess costs and broadband funding, the current funding mechanism has generally worked well to support telecommunications service to consumers in the state of Washington. The state’s adoption rate for voice service is presently near 98.7%,<sup>2</sup> a level that has been accomplished, in part, by virtue of the approximately \$100 million in annual support that Washington carriers receive and the use of which is reviewed through the UTC’s annual Eligible Telecommunications Carrier re-certification process. And while the NBP does a commendable job of establishing a thorough yet complicated path that may lead to a universally available broadband future, the Commission must ensure that the analytical

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<sup>1</sup> The UTC has authority to “participate in proceedings before federal administrative agencies in which there is at issue the authority, rates or practices for . . . utility services affecting the interests of the state of Washington, its businesses and general public, and to do all things necessary in its opinion to present to such federal administrative agencies all facts bearing on such issues . . . .” RCW 80.01.075.

<sup>2</sup> Universal Service Monitoring Report, CC Docket No. 98-202 (Data Received Through August 2009), Prepared by Federal and State Staff for the Federal-State Joint Board on Universal Service, Table 6.9.

tools that are developed and adopted in support of this policy shift are suitably accurate and sufficiently flexible to properly reflect the specific local or regional circumstances of states like Washington; a state that has broad swaths of service areas with extremely varied operational characteristics. Indeed, Washington's geographic and topographic differences, coupled with widely ranging population densities across 39 counties,<sup>3</sup> make it critical that the broadband costing model the Commission intends to implement takes into account all manner of the complexities of delivering meaningful broadband service, and, at the same time, not jeopardize the gains that have been accomplished through the existing Universal Service mechanisms. Adoption of a methodology that is inaccurate or mischaracterizes the actual costs of providing broadband services would jeopardize the gains that policy makers have made to date and would serve to widen the broadband availability gap between urban and rural that the NBP strives to narrow.

**I. Should a model be considered to estimate Universal Service Support for broadband services?**

A well-designed and robust model could provide a widely available analytical tool that may provide a basis upon which universal service could be administered and managed, if it is properly developed and constructed in a manner that reasonably projects the costs of deploying broadband service. Moreover, the use of a model to determine universal service support is not new to the Commission or to telecommunications carriers. Currently, the Commission's High Cost Model ("HCM") is used to determine loop costs for price-capped local exchange carriers ("LEC") and support is then provided to those companies whose

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<sup>3</sup> In terms of population and density per square mile, Washington's smallest county is Garfield County with approximately 2,250 residents across 710 square miles, which produces a density ratio of 3.2 residents per square mile. In contrast, Washington's largest county using the same criteria is King County, which, with approximately 1.9 million residents across more than 2,100 square miles, has a density ratio of approximately 898 residents per square mile.

average loop costs exceed a national benchmark. This process has been in place for a number of years. While broadband networks and their various technological requirements are not expressly incorporated into the HCM, the concept of using a model to determine universal service is one that has been used and should continue to be used at least for price-capped carriers.

## **II. What characteristics should a broadband model have?**

For a model to be useful and credible in determining universal service support it must have the following characteristics. First, it needs to be fully transparent and traceable so that all users, or even observers, have a meaningful ability to evaluate all of the inputs, variables, and computations, in order to assess the merits of the results of the model. While certain complexities are unavoidable and are, in fact, necessary for it to be robust, a model needs to clearly identify its methodology, its assumptions, and its inputs.

Second, the UTC believes that any model the Commission adopts should address both the costs and expected revenues associated with both broadband deployment and the continued provision of voice service over some reasonable time into the future. While the goal of the NBP's current model is to measure the costs of deploying broadband services, any model that is used to support the nation's universal service goals should incorporate requirements for the continued support of voice services, at least over some reasonable time frame, and to the extent the provision of voice service in rural areas continues to reflect costs that are separate from the provision of broadband networks. Some commentators may assert that voice services are merely one of the many possible applications that ride broadband networks, therefore, by properly estimating costs to develop a broadband network, voice services will implicitly be considered. To a large extent that may be true; however, where

voice services require investment that is separate from and unrelated to broadband deployment, the model needs to be robust enough to include specific voice-related costs that may be separate from broadband costs. While broadband deployment is indeed the goal of the NBP, the gains that have been made regarding the deployment and sustainability of voice services should not be sacrificed and any model that estimates universal service support must be robust enough to ensure that support for voice services can be estimated, not only for networks that have received legacy support, but also for extension into unserved areas.

Third, the UTC believes that any broadband model should incorporate all of the fundamental elements that private entities employ in business planning decisions. When companies examine investment alternatives, most private-sector firms develop business cases that consider all the potential revenues associated with a given investment, the forward-looking total cost of supporting a new investment or technology platform, alternative technologies that might be available or have a high likelihood of becoming useful in a two or three year planning cycle, and a comparison of Net Present Value for each planning alternative. Failure to incorporate these fundamental elements into a model will lead to results that are limited in application and provide false signals regarding least-cost choices and the amount of capital and operating expense required to properly develop networks capable of supporting both broadband and voice services.

Finally, the UTC believes the broadband model must address the characteristics of the smallest practicable geographic areas that can be effectively determined. A county-level model may work for some regions of the United States characterized by higher population densities and which contain a greater degree of uniformity in operational and geographical characteristics. However, such a geographic base for the model would not work well in a

state like Washington. In Washington, a county-based approach likely would create a cost profile that may materially understate actual costs on a per-line or per-subscriber basis because most of the counties in Washington are decidedly rural in nature and are characterized by a “hub and spoke” topology. That is, one community serving as a hub which is surrounded by many other smaller communities or households at great distance from the hub community. The area between the “hub” and other locations where subscribers may live, typically, is very sparsely populated and covers a substantial distance.

The cost model also must be able take into consideration the unique geological and topographical characteristics of a state. Washington has substantial mountainous areas, including the Cascade Range, that divide the state from North to South that may not be conducive to some broadband technologies a model may inappropriately assume would be reasonably deployed in such areas. Moreover, the state is also characterized by geologic factors, such as basalt layers, that have the effect of substantially increasing facility placement costs. Any broadband cost model must take into account this type of rural dispersion and a “county-based view” may well mask the actual costs of deploying broadband networks throughout any particular county. These factors, along with the considerable size of the majority of Washington’s counties, make a county-wide cost model unreliable and simply inappropriate for effective modeling of broadband costs in the state. Accordingly, the UTC strongly believes a better approach, though certainly not perfect, would be to develop a model that relies on census block information. Such an approach would take into account geological and topological factors and would be able to examine deployment costs in a more granular fashion. The result would be more accurate results.

### **III. Should the new model be developed or should the Commission's Hybrid Cost Proxy Model be modified?**

The Commission's Hybrid Cost Proxy Model ("HCPM") has been in use for over ten years and was designed in an era when developing costs for voice networks was the primary focus of policy makers. Federal and state regulatory requirements were developed from this model. Since its inception, broadband networks have been deployed and are steadily augmenting or, in some cases, fully supplanting networks that were historically designed to support provision of narrowband voice services. With the advent of broadband service a variety of new technologies and different network topologies, such as IP-based soft-switches, digital subscriber loop modules, and dense wave division multiplexing have emerged, all of which are increasingly supported by a fiber rather than copper transport structure. Finally, the development of alternative technologies including wireless and satellite networks reflect substantially different network deployment alternatives that the UTC believes may be difficult to wedge into the existing HCPM because these changes represent a sea-change in network evolution that the model may not be able to accommodate effectively.

Additionally, aside from these elements, the HCPM did not address revenue considerations which the UTC believes should be incorporated in creating a model that has broad-ranging uses that include providing a baseline for determining levels of universal service funding for broadband. The UTC believes a stronger, more meaningful approach would be to develop an entirely new model that incorporates the characteristics identified in Section II above.

#### IV. Conclusion

Through the NOI/NPRM, the Commission begins the long and difficult course to reform the nation's federal support mechanism as a means to address national broadband objectives. As discussed above, it is vitally important that any analytical tools or models adopted by the Commission to support broadband must sufficiently reflect broadband deployment and operational costs in a manner that takes into account local or regional circumstances of states like Washington that have service areas with extremely varied operational characteristics.

Respectfully submitted this 9th day of July, 2010

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